AMERICAN IONOSPHERIC PROPAGATION ASSOLATION

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TV, FM-DX

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B.J.BINGHAM BEDFORD, BROWN FERDINAND DOMBROWSKY BILLY DRAEB TOM HIDLEY DORIS JOHNSON RICHARD NIEWAN DENNIS SMITH WALTER SPAULDING

How would you like to take-over the management and control of the AIPA? Ibbet a lot of you would. But first are you aware of the time and effort such an undertaking would demand? I'd say no to that one. The point is
Art and I would like to retire from our long held.AIPA post's! For the sake of the organiz-SMITH

SPAULDING

s we believe qualified to conduct club affairs on a reasonable and workable basis. We are not looking for weekend wonders or oragnizational status-seekers! We are however looking for someone or preferably a small group who is in a position to keep things going, keeping in mind some of the following factors. mind some of the following factors.

Let's consider time: If your schedule is a mad compromise between math text's and giggly girl friend's, count yourself out. Likewise if you return from employment each day, exhausted and irritable. - A bellicose wife, a brood of little monster's or any negative family aspect's, must be considered also. Actually except for the monthly bulletin, A. I.P.A. duties require a rather small amount of time. But, even if one monster's time, mimeographing the bulletin while preventing junior from

Ilushing the cat down the bowl, is indeed a point to be pondered!
And now to operations: One man 'rule' of the A.I.P.A.is possible, but not really practical. The ideal in this direction we have in mind is sort of a team arrangement, wherein one will keep records, and another or others will complete the additional required duties. The equipment you'll need is mainly access to a typewriter, and a mimeo machine-both in good repair. Supplies like paper, ink, envelope's etc. are purchased with the due's income, eather via mail-order or locally. After a program of procedure has been established, AIPA operations become merely routine.

On to management: , Actually management and operations are practically synonymous. The differential being the prime aspect of one (operations) is physical output of group efforts in the form of a bulletin, and then management, which creates and hold's circumstances in which the prementioned group is in existence for. Thus membership problems, ax lore, record keeping, and all the rest, can be divided into seperates if necessary, but leadership if its to be effective must always be

aware of synonymous prone elements of dx clubmanship.

And last attitude and ability: If your the sort of chap who is highly exuberant about a project one day, falling to a phlegmatic state the next day, give the matter a second thought. The AIPA being continuous in nature requires methodical manipulation. So be your own judge here, if you can stay with a project good! Your the type we highly desire!

The only thing now to do is drop Art a letter expressing your intentions. We hope to clean this business up before the April elections, and thus facilitate the leadership transfer. Our upmost Best dx & 73's cooperation is assured.

NEW CH. 4-13 TV RECORDS CALL LOCATION DIST. DXER	,	INGS OF ACTIVE	
CHANNEL 4	2. B.	Seybold Brown	N. Y. 367 Mo. 348
KEDY Big Spring, Texas 1300 J.Pa	. 3. B.		Wisc. 298
ر المراجعة المراجعة المراجعة المراجعة ال	4 R.	Nieman	N. Y. 288
CHANNEL 7. CHLT Sherbrook, Quebec 210 GG.	5. A.	_Collins J. Bingham	N. Y. 281
CHLT Sherbrook, Quebec 210 GG. CKRT 85 GG	7 K	Schafer	Mo: 279 N.Y. 265
	8. F.	Dombrowski	Wisc. 265
CHANNEL 8		Janowiak	Wisc. 263
WSIV 70 BJB		Nieman	N. Y. 247
CHANNEL 9		Meers Eckberg	Ky. 233 Ill. 228
CKBL Matane, Quebec 150 GG		Rugel	Kans. 221
		Hauser	0kl. 217
CHANNEL 10	15. G.	Olson	Ill. 209
KWTX Waco, Texas (Tie) WHi 1375 RI WILX Lansing-Onadaga, Mich. 510 BJB	16. N.		N. Y. 208
WILX Lansing-Onadaga, Mich, 510 BJB	17. B.	Nieman Parillo	N. Y. 204 Ohio 199
CHANNEL 13	19. C.	Parillo Howington	Ohio 193
CKTM Trois Rivieres, Queb. 175 GG	20. D.	Ruland	Fla. 172
WHB Memphis, Tenn. 660 JPa		Hidley Prond	Ill. 167 Ill. 160
HEW RECORD HOLDERS		Wheeler	
h. 4-J. Parillo-1	24. D.	Johnson	Pa. 159 Wash. 153
		Voegele	N. Y. 130
h. 8-BJ. Bingham-1	27. J.	Swanson	Ill. 129
	*	Firen Hilding	Mo. 127 Ariz. 123
h.10-R. Italiano, Wm. Hider-1 h.13-G. Girard-1	29. R.	Walker	La. 122
		Walker Berg	Va. 120
ome of the newer members and maybe some.			Ky 120
of the older ones, don't quite understand whis Column so I'll try and explain it.			N. Sc.118 Ohio 117
is not your best record of a station			Cal. 116
but is that station record of yours the			N. Y. 113
best of any entered inthe Bulletin or by			N. Y. 109
and or letter received by me. Example:			Cal. 109
B. J. Bingham has WILX Ch. 10 received at 510 miles which is the farthest	38. C.	Fomeroy	Oreg. 106 Kans. 103
received by anybody that has it recorded			N. Y. 101
in the Bulletin or in the cards or letter	s 41.D.	Combs	Mo. 59
received by me, so BJB has the record of		Konec	N. Y. 93
WILX Ch. 10. If some of these records			Queb. 97
th. 8 at 70 miles it's because he's the			Sask. 96
nly one that has entered it. Sure hone	46. R.	Gaddy	Ohio &ô
his has answered a lot of questions.		Holbrook	Md. 73
The distances for each station in my		Webb	Mass. 69
clumn are the distances given by the	49. D.	Black	Ga. €5 N. Y. €4
members themselves as I don't have the		Italiano	N. Y. 63
o all who have written to me, I'd like		Dabelstein	Neb. 61
to hear from more of you. Please excuse	53. A.	Germond	N. J. 60
the errors I've made in the past, I'm	54. J.	Lutey	Neb. 53
ture there'll be more, but I do my best		Habermehl	Ohio 46 Cal. 45
Not to make them. Nore Ch. 2-13 and UHF records in March.		Preston Norberg	Cal. 45
devised Ch. 3 list later, maybe in April.			Wash. 28
meadline for March Feb: 24, 1962.	59. J.	Dyckman	Ohio 15
-		5 •	1.

Frank Wheeler, Box 176, R. D. 5, Erie, Pa. Best Gain-J. Parillo-26 Average Stations Rec.- 148

FCC NEWS ETC.

GRANTS.

Ch 10 Largo, Fla. 316Kw-177Kw.

Ch 10 Sault Ste. Harie, Mich. 87.5Kw-52.6Kw.

Ch 29 Dallas, Tex. 11.3Kw.- 6.41Kw.

(WLOX) Ch 13 Biloxi, Miss. 11.7 Kw....

APPLICIATIONS.

Ch 12 Walker, Minn. 31.Kw- 15.5Kw.
Ch 34 Binghamton from 34 to Ch 56 (new WBJA-TV)
Ch 26 WTVK(TV)Knoxville, Tenn. from ch 26 to a ch 8.

WELCOME new members. Peter H. Koch 753 E. 227 St. Bronx 66, N.Y. James G. Stoddart 8143 Linden Ave. Munster, Ind.

and the second of the second o

RE-NEWAL in from.. John Partillo Girard, Ohio.

The winter skip has made it's appearance in many parts of the country- so goes the reports. Good Trops has also been noticed and reported. You will note that the Eastern DX column is omitted until next month. Our editor Dick Nieman is asking for a replacement to take over his duties as Eastern DX Editor ... Is there any one with a type-

take over the Club. The right person or persons will be giving us a reliefe from the long positions held by King and I... We are sure it will be best for all. If only two or more who from the same locality could get together it could be run easily. Please contact me on this too !!!

ADDRESS CHANGE in from the following ...

4592 East Sierra Madre. Apt A. Fresno 26, Calif. Dennis Smith Mike O'Rourke . Production Dep't, KCRG-TV 1st Ave & 1st Street. Cedar Rapids. Iova

From time to time we receive requests for information regarding statements made in the various Editor's columns ---- We suggest you write to that particular Editor for your answers. (You could enclose a a cent stamp or return card for your reply)

We wish to thank Gary Olson for his time and efforts put forth in the Club "Standards" on count on stations for publication in the list of standings etc... For sure, there will be some poo and cons and we hore it won't be to the point where another war starts..... Walter Spaulding has done a wonderful job of compiling a TV list, and a word of thanks comes from all.

Word from Art Friese of White Planes, N.Y. to the effect of a UHF station on Ch 47 with ID "U.S. Coast Guard, Bandy Hook, N.J. has been received at his place. Art wants to know if it can be logged? I would say YES. Why Not?

With Spring around the corner-get your TV sets in shape, artennes etc. It means another TV-DX year is about to take place ... Also, in your in the position to do so-----Please write me about new heads for the AJPA...

313 E. Armory Gary Olson February 6, 1962 AIPA STANDARDS Champaign, Ill.

As was promised last month, we have the new AIPA standards for you. In the future, these standards must be used in submitting to the rank column. Only official totals will be listed in the column; official totals will be according to the AIPA official standards as listed below.

Remember, when submitting your totals to the rank column, include name, location, total received (officially) and the breakdown-VHF, UHF,

and number verified.

L. A station may be counted twice in the DXers log if it changes channels

(a) from high band to low band or UHF

(b) from low band to high band or UHF

(c) from UHF to high band or low band

A station may not be counted twice if it changes channels in the same band. Example: WRBL ch.4 and ch.3 would be counted as one station

2. A station may not be counted twice if it leaves the air and then returns to the air on the same channel.

3. A station may not be counted again if there is a change in ownership, call letters, transmitter location, power, etc. Exception: A station deemed as new with no relation to an old station previously operating on the same frequency may be counted as new. Example: WBUF and WNED could be counted as two different stations as they had no relation. A station such as WXIX would be counted as only one, since the old station was related to the new one.

4. Sharetime stations are not to be counted as two stations unless they

use different equipment and transmitter locations.

5. A translator station, ch. 70-83, may be counted in the official log.

provided it is not received by cable TV.

6. All stations should be positively identified by the DXer before listing them as official in the Rank Column. (If the DXer desires to count a tentative logging, he should list it as tentative in his own log. and allow his conscience to be his guide in adding it to the official log.) All tentatively received stations should be labeled as such when submitted to: the different columns and should not be counted as new stations.

7. Stations identified by the offset method are NEVER to be counted. Only positive identification and verification by audio or video

can be used to officially count a station.

8, If a DXer changes his location more than 75 miles, he must begin a new log, separate from the old. If a DXer works from two locations. each location should have a separate log, provided the distance between the locations is greater than 75 miles.

9. FCC station changes:

(a) channel changes as a result of deintermixture may not be counted unless they apply to #1 above.

(b) new stations created by deintermixture can be counted as new stations in the log.

(c) a change in offset frequencies of stations does not allow them

to be counted as new at any time.
(d) a station changing location (such as KGUL Calveston to KHOU Houston) is not be be counted as two stations, but one.

10. Verifications may be considered partial proof of reception. absolute positive proof never exists, so veries must be considered as a guide for counting stations, rather than absolute proof. with the third with

The above standards may be changed if AIPA members show sufficient request for a change. However, these standards appear to be what most members desired for official counting.

Nest month we shall consider and list the delinquent verie signers. Flease send your delinquent signers to me.

Until next time----Best DX,73's-Gar

Done By:

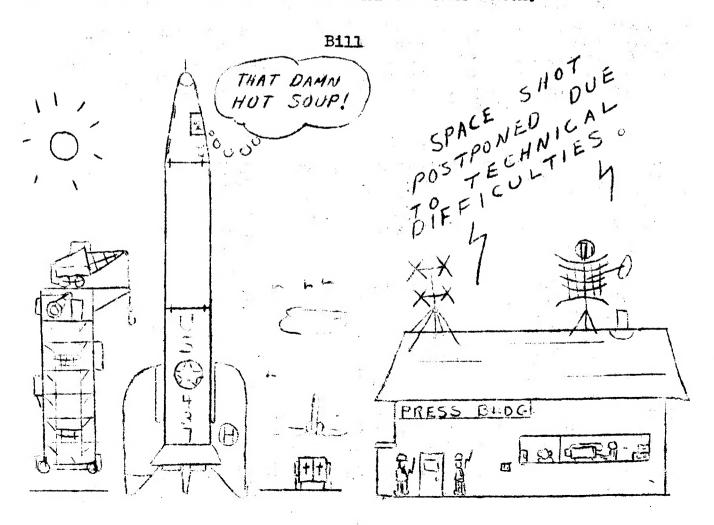
Well Here it is again another month and no more reports. I was going to start a contest as I mentioned a couple of months ago but I have decided against it. U shouldn't have to be paid to send in your reports each month. I must admit I haven't sent in a report lately like I The reason for that is because my antennas have been doing regularily. are down and I am waiting for some decent weather so I can get them back up atop my 90' tower. I almost got them back up last week as I thought the tower would be solid enough at the top without guys(it is guyed at 30-50 and 70 now) but it wasn't when I got up there and I was n't going to risk my neck. As soon as I get guys at the top and the weather is nice I'll get my antennas back up.

I wish every DXer would not depend on the "other dxer" to send in all the reports. If every DXer in the ATPA would send in just one report once every two or three months to the column of his or her choice I don't think the editors would have any trouble scratching up info for their columns.

I hope this gets through to some of you dxers out their who never do anything to contribute to the AIPA except read the bulletins!!!!!!!!

Well, I guess I will say 73's then and I hope the message got through.

P.S. -- Bill Hauser -- I got the report you sent me last month but missplaced it and hence it was not in the bulletin this month.



FM REPORTS

Al Germond, 279 Audubon Road, Engelwood, N.J. found Dec a terrific month for DX. His report, verbatum, follows: December was a great month on FM ..at least with me. One skip opening on the 11th in addition to extensive utilization of ms brought 14 new stations. Loggings by date are: 12-3 WLIN 95.5 Wausau, Wisc; WDHF 95.5 Chicago; 12-4 WMAQ 101.1 Chicago 12-7 WLOL 99.5 Minneapolis; WEFM 99.5 Chicago; WTAD 99.5 Quincy, Ill 12-8 WQFM(Local) 94.3 Babylon, NY; 12-9 WFMQ 107.5 Chicago; WXFM 105.9 Elmwood Park, Ill; WBBM 96.3 Chicago 12-11 WBEZ 91.5 and KSIH 91.5 St.Louis, Mo. (Both received via tape recorder at 3 PM-EST) 12-15 WEOK (local) 101.5 Poughkeepsie, NY; WPBS 98.9 Philadelphia.

Of the stations received via ms (9 total) 6 have verified, The Germinid meteor shower which peaked on Dec. 8-12 was a rich showerthat brought 600/700 radio meteors/hr.—a great number. The skip opening on the 12th was short but excellent. While not at home, I had the tape recorder set (by a clock timer) to go on at 2:50PM EST when local WNYE 91.5 signs off. At 3PM got information for both WBEZ and KSIH. Only WBEZ has verified through. With the addition of these two stations, 6 stations have been received at 91.5. FM-DX pert Germond's equipment includes an Eice HFT-90 FM tuner and a 10 element yagi antenna. Congrat's on a fine DX month.

Stanley Harper of Lisle, NY, another one of our fine eastern FM DXer's managed to log quite a few new calls in Dec. and Jan. Specific dates were not included by Stan. WCHN 93.9 Norwich NY; WOFM 94.3 Babylon NY; WEOK 101.5 Poughkeepsie NY; WOSJ 103.7 Atlantic City NJ; WNNJ 103.7 Newton, NJ. WOSJ & WNNJ logged when local on 103.7 in Ithica NY went of for a few hours (12-27-61) WAMU 88.5 Washington DC; WPBS 98.9 Phila, PA; WRFD 97.9 Worthington, Ohio; WQMRTyrone, PA 101.1; (TML Ottawa Quebec, Canada 93.9 Via m's on 1-3-62 — WJMC 96.3 Rice Lake, Wisc; and KADI 96.5 St Louis Mo. On 1-3-62 many stations were received via ms, some that Stan already had logged. Stan's fine total rests at 407. Excellent report Stan.

Jim Hughes, our newscaster for WSWM 99.1 East Lansing, Mich., has a new Zenith AM-FM portable. He has received WSAM Saginaw from his 3rd floor office. Jim wishes all FM DXer's who receive WSWM or WQDC to write him for a verie. Jim urges that a report be sent, not just a "I heard your station." Thank's for the report and info. Be seeing you soon. Jim's newscast on WSWM and on new WQDC 99.1, 41 kw. WQDC rebroadcasts Jim's newscast.

FM STATION NEWS

The following 2 stations are new in Mich.: WNEM Bay City, 102.5 (around 100 kw) using 1000 foor WNEM-TM tower - WJGG Houghton Lake 98.5 18kw. WWTV Cadillac, Mich. 92.9 now up to 100,000 watts WJEF Grand Rapids, Mich. now up to 500,000 ERP watts. WIBW 97.3 now on in Topeka, Kansas. KTOP now full time. KCMO has begun MX in Kansas City. KSTE 88.7, operated by Emporia State Teachers operates only during school sessions.

New Stations..actions by the FCC

CALL	Location	mcs	erp
KDES	Palmsprings, Calif	104.7	14.5 kw
W	Greenfield, Indiana	99.5	18.0
WXEL	Waterloo, Iowa	105.7	3.3
WBUD	Trenton, NJ	101.5	20.0
WVIP	Mt. Kisco, NY	106.3	•300
W	Patchogue, NY	103.9	.170
K	Eugene, Oregon!	94.5	3.4
MAIW	Williamston, No	103.7	3.0

CHANGE: WCCB West Yarmouth, Mass. now 94.9 3.1 kw-was 94.3 with 1.0 kw.

KSPL Diboll Texas 95.5 will be silent to March 15.

Constrction completion dates: WAEZ 94.9 Miami, Fla to 2-1-62; KXO R 102.7 Fresno, Cal 1-10-62. KANU 91.5 100 kw Lawrence, Kansas began FM mx-stereo broadcasting at 1 PM CST on Dec 17, 1961. FM stations on air as of Nevember 30 (commercial only): 894 Total authorized fm commercial stations: 1108. Thanks to Hughes, Germond & Pomercy for the above.

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The Dec. 1961 issue of "Television" magazine has a list of world TV stations so I'll list here some of the newer ones that I haven't
  listed before:
     BOLIVIA: experimental station on American MTSC standards: no channel.
     CAMBODIA: MTSC standards station in Phnompenh, another victory for
             the free world in neutral Cambodia which accepts plenty of aid
             from both sides, but so far has managed to stay out of the war in which its neighbors are engaged-Laos and Viet Nam.
    AUSTRALIA: I finally got a list of channels for all the new "regional" stations, all commercial unless designated ABC which is the govt.-owned network: ( see Nov. IDX for new ch. numbers P1-13): Ballarat, Vict. 8; and ABC 4.

Bendigo, Vict. 10; and ABC 2.

Canberra, fed. 10, and ABC 4.

Goulborn Valley, Vict. 8, and ABC 4.

Central Tablelands, NSW 10, and ABC 2.

Newcastle, NSW 4; and ABC 6:

Richmond, NSW 10; and ABC 8.

N.E. Tasmania 11. and ABC 4. (Two other comm. sta. are not on.)
             N.E. Tasmania 11, and ABC 4. (Two other comm. sta. are not on.)
    ARGENTINA: commercial TV has become so popular that the govt. has sold its station, IR3-TV, ch.A7. New call is IS82-TV. This was the first Argentine station on the air back in 1951, I believe.
             TV really began only 18 months ago several more stations began,
    BRAZIL: Barbacena, M.G. A6; Bauru, S.P. A2; I guess these 2 are on the air but not sure. A2 in Goiania, G.O. is on. Vitoria, E.S.
             is listed, but no channel or indication if it is on the air yet.
             Ditto for Juiz de Fora, M.G. 5, Londrina, P.R. 3, and Guaratingueta, S.P. 12. The mess in Sao Paulo is apparently strai-
             ghtenned out at last: It now looks like this: PRE4 is on 2, no
             station on 3 anymore, PRF3 is on 4, and the rest of the stations are unchanged: Paulista-5, PRB9-7, PRG9-9, PRA6-11, and PRH9 is under construction on ch. 13. The 9 UHF stations are unchanged.
             For several years, every time I got a new list there were stations on adjacent channels 3 and 4, and as many as 3 on ch. 3 at one time, although they didn't share time. Under the present
             situation Radio TUPI has no station, but thats their problem.
     CHILE: it looks like ch.A2 in Santiago has moved to ch.13. 625 lines
             same as Argentina and Venezuela although they use MTSC channels.
     CHINA: Peking up to 5kw on ch.C2, 571-642mc; Russian standards.
    COSTA RICA: a new one in San Jose is TITT-9, added to the other ch4&7
    CUBA: "Television" lists only 3 stations operating in all of Cuba,
             CMFG-11 in Camaguey; CMBF-4 and CMQ-6 in HABANA. If thats true;
             my unided Spanish station last June must have been HIT or WKAO.
             But I haven'T heard from the stations/with a yes or no answer.
    CMAB-2 was testing then and i got it, but I also got programs. ECUADOR: HCPTE is the call of the ch.4 station in Guayaquil, 2kw.
    GUATEMALA: a new station in Guatemala City is TGT-11. 3rd sta. there.
MAITA: station under costruction on ch. E6, commercially operated.
NETH. ANTILLES: PJA-6 is planned at Aruba. Was due on cn. 7 Or 8 B4.
PERU: ch.A13 is now on in Lima, OAXAD-TV, Lima's third station:
PHILIPPINES: the Manila area's 5th TV station is now onthe air, ch.
Al-- DZMB-TV. Cebu City's first is also on, DYBC-3.
    RUMANIA: some planned stations are listed: Birlad R8, Petesti-4, and
             Orasul-3, or Orasul-Stalin-3.
    SPAIN: Sevilla, wh. E3 is under construction; Zaragosa-3 is on.
    URUGUAY: Montevideo-Al2 un der construction; ch. 4 and 10 are on.
I'm quitting early so we can have this machine fixed. More next month.
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- A I P A

- WESTERN D X 4592 East Sierra Madre, Apt. A
- February 1962 Fresno 26, California -

As it turned out, there was some winter sporadic-E in a few scattered locations of the West, but it wasn't particularly widespread. It was seen at different spots on Dec. 11, 16, and Jan. 17. There was also a little trops here and there, as we'll discover in the reports.

It was good to hear from Morris Foote, of Middleton, Idaho-he has been very busy for quite a while, which is why we haven't heard from him for some time. He did a little TV-DXing during the last year, with the following new stations: May 2, KPIX-5 Calif; May 10, KTVI-2 Mo.; June 5, WBBM-2 III. and KNME-5 N.Mex; June 16, KORN-5 S.Dak.; August 5, KRON-4 Calif. He would like some help with an unID-on May 5, he saw a ch. 3 test pattern at 5:35 AM MST--the call KTVX was in the upper left, with a "3" in the center, and the town (obscured) in the lower right. His total is now 105. Morris wonders if a Western Convention could be held somewhere around Seattle this summer, at the same time as the World's Fair there. How does this sound to everyone?

David Crockett of Burlingame, California, has been busy with studies and therefore hasn't thought about DX, but he tells me of the wild time he had in San Francisco on New Years Eve, with a lot of pandemonium keeping the police busier than ever before. He got some good photos of the excitement, too. Really must have been quite a time. Dave.

Morton Meehan, formerly of Livermore, California, has moved once again-he is now in King City, Calif., and expects to be there for quite a while (PO Box 271). There are still mountains around him, so the TV and FM signals have their usual peculiarities of sometimes bending down over the hills well or n ot so well. King City is about 135 air miles south of San Francisco.

B.J. B.J. Bingham of Festus, Missouri reports that Es was seen on Dec. 11 and 16, but nothing was identified. B.J. has heard Ed Hepp's radio show on KOIL Omaha, with good reception (it can be heard here in California, too, when other stations are off).

Bill Hauser, in Enid, Oklahoma saw some Es and trops--Jan. 17: Es, unID-2 west (1430 PST Yogi Bear, 1500 Groucho), unID-3 Calif., unID-4 west (offset plus). Jan. 20-21: trops, MDUB-13 KCBD-11 KOSA-7 Texas, KSWS-8 N.Mex, KVKM-9(new--4400 mi) Monahans, Tex, KMID-2(new--405) Texas. Jan. 21: trops, all Texas, KRBC-9, KONO-12(new--485) San Antonio, KDUB-13 KOSA-7 KPAR-12. His new stations were on all night (Jan.20-21) with telethons. His total is now 224.

Although not strictly a Western item, long-time TV-DXer Frank Hill of Gallipolis, Ohio, has written, and mentions that he would like to hear from any of you fellows that like to correspond—so if you want to to write Frank, hissaddress is Box 147, Gallipolis, Ohio.

Here in the Central Valley of California, trops has been good for some weeks, due to the dense fog blanket and its associated inversion layer conditions. The usual trops stations from the north (Sanramento, Chico, and Redding, up to 400 mi) were seen, some of them very good in the last few days of January. Also, the Sacramento-Stockton stations, KCRA-3, KXTW-10, and KOVR-13, are now telecasting from their new 1549-foot tower, the tallest tower on the west coast.

Please note--my address has changed -- send reports to that address.

Best of DX to all Dennis

MATTENTION DIERS IN SOUTHERN HALF OF US WEFFORECAST FOR FEB MARCH APR FOR NORMAL OFF-SEASON SKIP.. DXERS IN NORTHERN US SHOULD BE ESPECIALLY WATCHFUL FOR VIOLENT WEATHER PATTERNS IN THE SPRING.

WEST TIMES: lat a marming from 10sm to ab out 1:00pm and evening from 5pm to 7pm;

STATIONS only "Tropical" American single-hop low-band stations are included in this forecast. This excludes all high-b and and double-hop stations b econes of the rarity of off-season double-hopp and the almost impossibility of high band Eskip during the spring. Also excluded are Mexican stations north of the Tropic of Cancer, memely: Monterrey: TEFB-TV 3, XET-TV 6; Hermosillo: TEWHATV 6; Ciudad Aueres: IEPM-TV 2, XEJ-TV, 5; Tourecas IEPM-TV by Tijuenas XETV 6; Any reception of these stations is indicatives of a more general E-skip opening.

L. Maxico City, Mexico Stations: XEW-TV 2 XHTV L XHGC-TV 5 2. Guadalajara, Mexico Stations: XEW-TV 2 XEG-TV L XEHL-TV 6

3. Cerro del Zamano, Merico Statione : XEZ-TV 3(XEV relay) XHTV-relay 6

Habana, Cuba Stations: CH-TV 1 CMQ-TV 5

Santa Clara, Cuba Stations: CH-TV 3 CMHQ-TV 5

Camaguey, Cuba Stations: CMJ-TV 1 CMJL-TV 6

7. Santiago de Cuba Stations: CMKU-TV 2 govt. 5

8. Sem Juan, Puerto Rico Stations: WKAQ-TV(El Mundo) 2 WIFM-TV 3 WAPA-TV 4 WIFR-TVC

Mayaguez, Puerto Rico Station: WORA-TV 5

- 10. Santo Cerro, Deminion Republic Station: Hitery relay 2 (LVD)
- 11. Santo Domingo, Deminican Republic Station HIT-TV 4(LVD used-La Voz Dominicana)

12. Guatemala City; Guatemala Station: TG-BOL TV 3

11. San Salvador, El Salvador Stationes ISY-TV 2 YSU-TV 1 YSER-TV 6

15. **Managua, Nicaragua Station: INSA-TV 6

lo. Panama City, Panama Station: HOHM-TV h (also 2 and 6 relays planned)
17. Medellin, Columbia Station: HJRN-TV 3

- 18. Caracas, Venezuela Stations: XVKS-TV 2(Radio Car.) YVLV-TV h(TV Venezolana) IVKA-TV 5(TV Nectional)
- 19. Maracalbo, Venezuela, Stations: IVKS-EV relay 2(500,000 wettell) IVLV-TV L

200 Berguistaneto, Venezuela Station se YVKS-TV relay 6 21. Valarbia, Venezuela Statione Radio Valencia 3

20. Puerto La Cruz, Venezuela Station: YVLV-TV relay 6(250,000 wattail) **Number 15, where list ed in forecasts, applies only to immediate Gulf coastal area or the Florida peninsula and the property of the Florida Health of F

WEATHER PHENOMENON TYPES:

- 4. Cold, snowy weather the southern and Central Rockies with abnormally mild weather in the southern and central states.
- B. Cool, rainy weather in California and destert southwest with mixita very cold Arctic air covering area east of Rockies, cold wave in southern states.

C. Same as B, except Florida remains in mild air flow from couthwest, moderately

D. Blizzard and or heavy most and cold wave in central and western plains states, especially Kansas, east Colo. area, often with warm, maist sir over South and severe thunderstorm activity, possible tornadoes in Texas-Okla-Ark. Ho. area.

Blizzard ani/or heavy snow and cold wave West Texas and Oklass thunderstorm and possib le tormado activity in Ark-Lag-Miss-Tenn area.

To Severe thunderstorm and possible torando activity Ala-Ca-S.c. area with cold wave and heavy show conditions moving from comtral plains into the Great Lakes area.

G. Severs thunderstorm and possible tornado activity Kanas-Meb r. Lowa area or even further north in plains with blizzard and cold wave in Montana area of high plains. He Severe thunderstorm and possible tornade activity Chio-Tennosses Valley areas or

northward into Great Lakes with b lizzards and cold wave in morth-central plains. The account forecasts for each area are on the next page, PART III. of the CCI column.

AMERICAN IONOS HERIC PROPAGATION ASSOCIATION FEMEUARY 6, 1962 CO-CHANNEL IN TERFERENCE COLUMN, Bedford Brown, 6 141 5. Marrield, Chicago 38 Illinois

ATTENTION*DXERS IN SOUTHERN HALE OF US*SPECIAL OFF-SEASON E-SKIP FORECAST FOLLOWING THE CONCLUSION OF "THE ATMOSPHERE". (CHECK AT END OF COLUMN FOR YOUR STATE.)

THE ATMOSPHERE (continued)

Se . 11 50 0

THE IONOSPHERE (co atimed)

THE F2 LAYER The F2 layer, b ec suse of its im portance in shortwave vadio communication, has been studied more thoroughly than any other reflective layer. Much is still unknown about its great diurnal and sesso nai fluctuations in intensity im relation to sunspot antivity. The free electron densities in this region vary trememdously, reaching maximum intensity shortly after moon local time. It cam immediately bee seem that daylight over the transmission path is essential for peak reception quality...... The F2 layer ranges in height from 220 to 380 kilometers and is probably caused by the action of mitraviolet photons on molecular nitrogen or stomic oxygen.

THY G IALER Om occasions when the F2 lay er becomes very weak, am even higher reflective layer shows up at around 400 kilometers, the G layer. Probably caused by the action of ultraviolet photon on nitrogen atoms, the G layer can be marriaged considered as unimportant since it is normally smothered by F2 layer reflection.

AURCRA BOREALIS The surors b oreals or Northern Lights is caused by the bomberdment of the ionosphere (80 to 300 km.) by charged particles from the sup. Scientists are still divided in opinion as to the exact cause, but most suthorities centend that it is caused by either electrons or protons acting upon caygen and nit rogen molecules and stome. Some so-called experts say that radio and t elevision disturbances are not caused directly by the aurors borealis itself but that the general magenetic storm that produces the aurors is responsible for the radio and television interference.

At this point I would like to ask f or so me comments on t he aurora benealis firm you northern doer s. Do you always see aurora display when the sky is clear, of course) when you are getting aurora skip, or do you somet imes get aurora type does with no wisible display im the sky? I would appreciate some cards from you on this This concludes the short discussion of the radio and television reflective layers.

Went month an at tempt will be made to start a reasonable discussion of some beauty weather fact s, which are necessary to permit an understanding of first what we are up against in trying too link weather with E-skip or other televicion discussion discussi

HOW GLORIOUS IT WOULD BE IF EVERY TV STATION SKIPPED AS MUCH AS THIS TYPEWRITER 118%

OFF-SEASON E-SKIP OPENINGS IN SOUTHERN U.S.A.

As a southern deer f or about eleven years, I have much experienced the off-reason E-skip openings (im normally slack months) that seem to rock their way into the southern states from tropical America during certain weather phenomena. You may think perhaps, that I am jumping the gun, on attempting to predict E-skip openings before I have begun to elaborate on the subject. However, there is no reason, to my knowledge, why I should not go shead for those of you who might benefit from the forecast. General F-skip openings at off-season times must often coour when very vigorous storms are in progress, usually tornado or severe thunderstorm activity and heavy snow and cold wave all thrown in to the general weather pattern. The E-skip and the weather effects are only indirectly connected, but I don't want to go into details on this yet. The weather conditions and the skip stations will be listed in code form on the next page. You southern divers can then check your area such as Northeast Texas or South Georgia, etc., to see what weather types (A-H) is may bring in which Latin American stations (1-22).

centinuing with FEBRUARY_MARCHEAPRIL FORECAST for E-skip openings from tropical America

ACTUAL FORECAST FOR AREAS-WEATHER TYPES AND STATION CODE NUMBERS

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SOUTHERN COLORADO: B 1, 2, 3. C 1, 2, 3.
NORTHERN COLORADO: B 2. C 2.
MARYLAND-Delaware: E 4, 5. F 4, 5. H 4, 5, 6.
SOUTHERN NEW MEXICO: B 1, 2, 3. C 1, 2, 3.
NORTHERN NEW MEXICO: B 1, 3, 2. C 1, 2, 3.
 SOUTHERN ARIZONA: B 1, 2, 3. C 1, 2, 3. NORTHERN ARIZONA: B 1, 2, 3. C 1, 2, 3.
                                                                              CENTRAL CALIFORNIA: .
 SOUTHERN CALIFORNIA: B 2. C 2.
 SOUTHERN NEVADA: B 2, C 2.
 SOUTHERN UTAH: B 2, C 2.
WESTERN TENNESSEE-KENTUCKY: A 1, 3. ID 1, 3. E 1, 3, 4, 5, 6. G 1, 3, 4, 5.
          H 1, 3, 4, 5, 6.
 EASTERN TENNESSEE-KENTUCKY: E 1, 3, 4, 5, 6, 7. H 1, 3, 4, 5, 6, 7.
SOUTHERN MISSOURI: A 1, 2, 3, D 1, 2, 3, G 1, 2, 3, 4, 5. H 1, 2, 4, 5.
NORTHERN MISSOURI: G 4.
 SOUTHERN ILLINOIS: G 4, 5. H 4, 5.
EATHEME SOUTHERN INDIANA AND OHIO: G 4, 5. H 4, 5.

ARKANSAS: A 1, 2, 3, 12. D 1, 2, 3, 12. E 1, 2, 3, 4, 5, 6, 7, 12, 13, 14. G 1, 2, 3, 4, 5, 6, 7, 12, 13, 14. H 1, 2, 3, 4, 5, 6, 7, 12, 13, 14.

LOUISIANA: A 1, 2, 3, 12. D 1, 2, 3, 12. E 1, 2, 3, 4, 5, 6, 7, 12, 13, 14, £ 15**

G 1, 2, 3, 12, 13, 14, 15**. H 1, 2, 3, 12, 13, 14, 15**.

NORTHEAST TEXAS: A 1, 2, 3, 12. D 1, 3, 2, 12. G 1, 2, 3, 12.

NORTHWEST TEXAS: B 1, 2, 3, 12. D 1, 2, 3, 12. E 1, 2, 3, 4, 5, 6, 7, 12, 13, 14, 15**.

SOUTHEAST TEXAS: A 1, 2, 3, 12. D 1, 2, 3, 12. E 1, 2, 3, 4, 5, 6, 12, 13, 14, 15**.

SOUTHWEST TEXAS: A 1, 2, 3, 12. B 1, 2, 3. C 1, 2, 3.

EXTREME SOUTHERN TEXAS(LOWER RIO GRANDE VALLEY): A 2. 12. D 2. 12. G 2. 4, 5. G.
 EXTREME SOUTHERN INDIANA AND OHIO: G 4, 5. H 4, 5.
 EXTREME SOUTHERN TEXAS (LOWER RIO GRANDE VALLEY): A 2, 12. D 2, 12. G 2, 4, 5, 4,
           12, 13, 14, 15**.
 SOUTH CAROLINA: E 4, 5, 6, 7, 8, 10, 11. F 4, 5, 6, 7, 8, 9, 10, 11. H 4, 5, 6, 7,
 NORTH CAROLINA; E 4, 5, 6, 7, 10. F 4, 5, 6, 7, 8, 10, 11. H 4, 5, 6, 7, 8, MISSISSIPPI: A 1, 2, 3, 12. D 1, 2, 3, 12. E 1, 2, 3, 4, 5, 6, 7, 10, 12, 13, 14, 15**. G 1, 3, 2, 4, 5, 6, 7, 12, 13, 14, 15**. H 1, 2, 3, 4, 5, 6, 7, 12,
           13, 14, 15**.
 ALABAHA: A 12. D 1, 2, 3, 12. E 1, 2, 3, 4, 5, 6, 7, 10, 12, 13, 14, 15**. Rxt, F 4, 5, 6, 7, 10, 11, 12, 13, 14, 15**. G 1, 2, 3, 4, 5, 12. H 1, 2, 3, 4, 5,
 6. 8. 12, 13, 14, 15**.

SOUTH GEORGIA: E 1, 3, 4, 5, 6, 7, 8, 10, 11, 12, 13, 14, 15**. F 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15**. H 1, 3, 4, 5, 6, 7, 8, 10, 11, 12, 13, 14, 15**.

NORTH GEORGIA: E 1, 3, 4, 5, 6, 7, 10. F 4, 5, 6, 7, 10. H 1, 3, 4, 5, 6, 7, 10. EXTREIE NORTHWEST FLORIDA: A 12. D 1, 2, 3, 12. E 1, 2, 3, 5, 6, 7, 10, 11, 12, 13, 14, 15. F 4, 5, 6, 7, 10, 11, 12, 13, 14, 15**. H 1, 2, 3, 4, 5, 6, 7, 10, 11, 12, 13, 14, 15**.
 10, 11, 12, 13, 14, 15**.

NORTHEIN FLORIDA: A 10. C 1. 2. 3. 7. 8, 9, 10, 11, 12, 13, 14, 15, E 1, 2, 3, MY
6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16. F 6, 7, 8, 9, 10, 11, 12, 13, 14, 15
 10, 11, 12, 13, 14, 15. Will repeat any garbled part in March, 73's, Bedford.
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